

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
PRIMARY RECORD

Primary # _____
HRI # _____
Trinomial _____
NRHP Status Code _____

Other Listings _____
Review Code _____ Reviewer _____ Date _____

Page 1 of 3 Resource name(s) or number (assigned by recorder) N-243

P1. Other Identifier: Flight & Guidance Simulation Lab; Army/Navy Rotocraft Division, Flight Control & Cockpit Integration Branch

***P2. Location:** ☒ Not for Publication ☐ Unrestricted

***a. County** Santa Clara

***b. USGS 7.5' Quad** San Francisco North, Calif. **Date:** 1995

***c. Address** 655 Cooper Loop

City Moffett Field

Zip 94035

***e. Other Locational Data:**

***P3a. Description:** (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries.)

Building N-243 is a large three-story Brutalist complex that is used as a research facility, office, and laboratory. The building's footprint includes a round, circular form (former centrifuge) at the northwest corner that is connected to a larger rectangle. The rectangular massing features circular drums at the southwest and southeast corners, as well as several overhead steel warehouse doors and aluminum-frame doorways. Along the east façade is a tall seven-story tower, which faces the adjacent air fields. The exterior of this complex is primarily composed of scored concrete punctured with regularly spaced openings. The west façade features a concrete frame, aluminum-sash windows, and an exterior staircase, all of which mark the main entry into the complex. This is the only façade with fenestration. The circular form at the northwest corner is 2-½ stories in height with an overhead steel door and a corrugated metal penthouse. The seven-story concrete tower also features an overhead steel door, three-stories in height. On the south façade of the rectangular massing is a series of concrete piers, which are also scored like the rest of the exterior. An additional entry is located within a rounded niche at the southeast corner. This building has served as a flight simulator for advanced aircraft. It is 108,670 sq. ft. For technical description, see Continuation Sheets. This building appears to be in good condition.

***P3b. Resource Attributes:** (list attributes and codes) HP 39 – Other: Research and Laboratory

***P4. Resources Present:** ☒ Building ☐ Structure ☐ Object ☐ Site ☐ District ☐ Element of District ☐ Other

P5a. Photo



P5b. Photo: (view and date)
View of west façade, (08/04/05)

***P6. Date Constructed/Age and Sources:** 1967

***P7. Owner and Address:**
United States of America as
represented by National Aeronautics
and Space Administration (NASA)

***P8. Recorded by:**
Page & Turnbull, Inc.
724 Pine Street
San Francisco, CA 94108

***P9. Date Recorded:** 08/04/05

***P10. Survey Type:**
Reconnaissance

***P11. Report Citation:** National
Aeronautics and Space
Administration, *Technical Facilities
Catalog*, Volume 1, publication NHB
8800.5A (1), October 1974; Technical
Information Division, Ames Research
Center, *Ames Research Facilities*

Summary, 1974; Donald D. Baals and William R. Corliss, *Wind Tunnels of NASA*, NASA SP-440, 1981.

***Attachments:** ☐ None ☐ Location Map ☐ Sketch Map ☒ Continuation Sheet ☐ Building, Structure, and Object Record
☐ Archaeological Record ☐ District Record ☐ Linear Feature Record ☐ Milling Station Record ☐ Rock Art Record
☐ Artifact Record ☐ Photograph Record ☐ Other (list)

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
CONTINUATION SHEET

Primary # _____
HRI # _____
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Resource Name or # N-243

*Recorded by Rich Sucré, Page & Turnbull

*Date 04/07/06

☒ Continuation ☐ Update

3. FLIGHT SIMULATOR FOR ADVANCED AIRCRAFT

DESCRIPTION:

The Flight Simulator for Advanced Aircraft (FSAA) is used for investigations of landing, take-off, and general handling qualities of large aircraft as well as evaluation of crew tasks. The large lateral travel permits examination of such maneuvers as lateral side-slip during a landing approach or engine-out on take-off. Both pilot and copilot seats are available. The cab is provided with a virtual image TV display; panel, center and overhead instruments; a hydraulic control loader system; auto-throttles; and aircraft sound generator. Aircraft dynamics are provided by an XDS Sigma 8 digital computer (96,000 word memory) and an EAI 231R analog unit used in the closed-loop mode. Research operations utilizing this simulator have included investigations relating to the development of improved handling qualities and airworthiness criteria for large jets and STOL aircraft.

DRIVES:

Ward-Leonard Electric servos

STATUS:

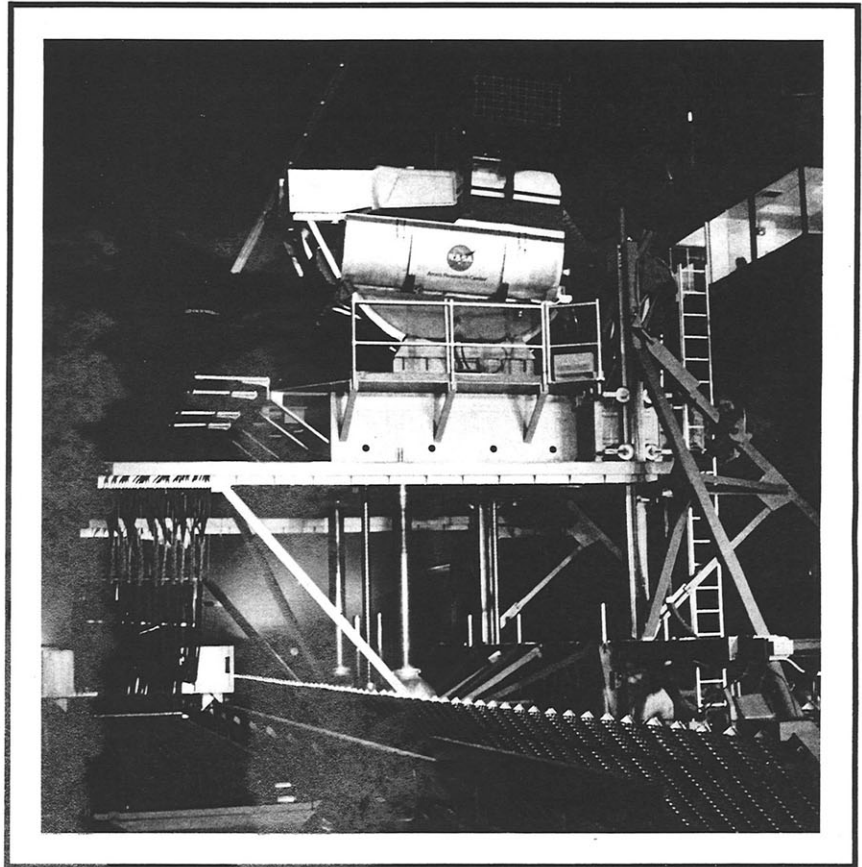
Operational since 1969

JURISDICTION:

Simulation Sciences Division
George A. Rathert, Jr.

LOCATION:

Building N-243



10. VISUAL SCENE PRESENTATION SYSTEMS

DESCRIPTION:

Visual Scene Presentation Systems or Visual Flight Attachments are used in conjunction with the various Flight Simulators to provide the pilot with a color or black and white representation of a visual scene as would be observed during approach, landing, take-off, and taxiing exercises on conventional, STOL and V/STOL runways and on aircraft carriers under varying lighting, cloud, and visibility conditions, by means of a closed-circuit TV system. Three such attachments are described here, two manufactured by Redifon Limited, Crawley, Sussex, England, Visual Flight Attachments II and VII; one manufactured by Redifon Air Trainers Limited, Aylesbury, Bucks, England, Visual Flight Attachment IV.

DRIVES:

Visual Flight Attachments II & VII, Electrical Servo-Position
Visual Flight Attachment IV, Electrical Servo-Position (three linear drives can be driven by rate inputs)

STATUS:

Operational since 1965 (II), 1967 (IV), 1973 (VII)

JURISDICTION:

Simulation Sciences Division
George A. Rathert, Jr.

LOCATION:

Buildings N-210, N-243, and N-239A

